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Research Note 79-39

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DUTY MODULE METHODOLOGY FOR OFFICER CAREER
MANAGEMENT SYSTEM DEVELOPMENT

A.L. Korotkin, H.I. Hadley,
W.P. Davis, and C.N. Marsh
American Institutes for Research

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20. Abstract (cont)

→ This report summarizes research to refine, expand, and integrate the state-of-knowledge regarding Duty Modules into a coherent and useful system for application to the U.S. Army Officer Personnel Management System (OPMS).

9 A set of Duty Modules had previously been developed for the Infantry, Ordnance, Quartermaster, and Engineer Branches. Although the primary goal of the current work was to refine and document the methods and procedures for developing and applying Duty Modules to OPMS, it was deemed useful to analyze positions from a new (fifth) Army Branch as well. The Branch selected was Armor. The complete set of current Duty Modules is now applicable across the five Army Branches analyzed to date.

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A complete set of Duty Module and Job Description material assembled by the Army Research Institute for the Behavioral and Social Sciences (ARI) to support a number of R&D efforts consists of the following nine volumes:

1. Army Officer Duty Module Manual. ARI Research Note 79-31, October 1975.
2. Duty Module Methodology for Officer Career Management System Development: Catalogue of Army Officer Duty Modules. ARI Research Note 79-32, October 1975.
3. Duty Module Methodology for Officer Career Management System Development: Task Data Bank Index. ARI Research Note 79-33, November 1975.
4. Duty Module Methodology for Officer Career Management System Development: Task Data Bank, Task List. ARI Research Note 79-34, October 1975.
5. Results of Field Survey to Evaluate an Experimental Set of Officer Duty Modules. ARI Research Note 79-35, January 1974.
6. Development of Criteria Dimensions for Evaluation of Performance and Career Development of Entry-Level Officers, ARI Research Note 79-36, November 1974.
7. Duty Module Relationship to Training and Experience Requirements in Career Development and Alternate Specialty Selections. ARI Research Note 79-37, February 1975.
8. Design and Validation of Additional Duty Modules for Engineer and Ordnance Officer Positions, ARI Research Note 79-38, February 1975.
9. Duty Module Methodology for Officer Career Management System Development, ARI Research Note 79-39, January 1976.

The set of duty modules and job descriptions contained in these nine volumes was developed by the American Institutes for Research (AIR) to meet a requirement for job information in an ARI research contract being executed by Educational Testing Service (ETS). This contract was part of the ARI research program on Career Progression (Information) Systems. These duty modules, developed for use in a career information system, have proved to be highly valuable for meeting a number of other research and developmental objectives.

The duty module concept evolved from interactions between the American Institutes for Research (AIR) and U. S. Army Research Institute for the Behavioral and Social Sciences (ARI). These interactions emerged from the AIR "Taxonomy" contract which was originally initiated and supported

by the Defense Advanced Research Projects Agency (DARPA). At the time monitorship of that contract was transferred from Air Force to Army, ARI was given the responsibility for redirecting the effort from an emphasis on experimental psychology principles to the field of personnel psychology. ARI proposed the development of a job taxonomy, based on a component of a duty position assignable to a single individual. This component could be considered as a building block for job re-engineering, useful for constructing TDA's or TO&E's, for tracking career progression of individuals, and for providing career information to Army personnel. It was hoped that such a job component would provide a common language as a basis for combining manpower requirements and resources, with the integration of training and career progression, into a single self-consistent operating system. AIR, continuing under contract supervision by ARI, developed this concept further and began referring to these job components as duty modules.

The reader is particularly urged to note that these duty modules were not specifically developed for use in developing or evaluating either school programs of instruction (POI) or the achievement of OJT objectives.

Current ARI research efforts are modifying and evaluating the duty module concept in order to provide a job component measure that is appropriate for use as a data element of a Training Information Feedback System (TIFS). The final form of this data element will reflect a greater concern for criticality of tasks and for the feasibility of defining criterion referenced standards corresponding to these tasks.

DUTY MODULE METHODOLOGY FOR OFFICER CAREER MANAGEMENT SYSTEM DEVELOPMENT

INTRODUCTION

The American Institutes for Research (AIR) under contract to, and in collaboration with, the Army Research Institute for the Behavioral and Social Sciences (ARI), has developed and refined a unique personnel management system concept called the Duty Module. The Duty Module is a product of a procedure for representing clusters of tasks which go together statistically and logically so that jobs can be represented in a more specific manner than an MOS and with greater simplicity than task descriptions. It is anticipated that the Duty Module concept has great utility across the broad spectrum of requirements of a large scale personnel management system such as that found in the U.S. Army.

The purpose of the research described in this report was to refine, expand, and integrate the state-of-knowledge regarding Duty Modules into a coherent and useful system for application to the U.S. Army Officer Personnel Management System (OPMS).

The major objectives of this contract effort were:

1. To develop a Manual of Methodology and Instructions for the Applications of Duty Modules to the Officer Personnel Management System. This manual will allow the Army to assume the responsibility for maintaining the functions of job analyses and Duty Module design so as to complete, maintain, and update, on a continuing basis, a complete Duty Module System for all Army officer positions.
2. To develop a coherent data base of task statements used in designing Duty Modules so that repeated tasks are represented by the identical task statements. All task descriptions were reviewed and the best task statement selected and assigned to all relevant modules. As the tasks were studied and revised, they were given individual code numbers and a comprehensive Task Data Bank was established. This Data Bank contains 1648 sequentially numbered tasks and references the Modules in which they appear.
3. To facilitate access to and use of the Task Data Bank, a task classification system and index were developed. The Index was

constructed using a "keyword" technique so that the tasks for all existing Modules are accessible manually, or eventually from computer storage by use of individual and combinations of keywords ("coordinate indexing"). The retrieval of existing standardized task statements will ensure consistency and facilitate design of future Duty Modules as new officer positions are analyzed.

4. To analyze and describe in Duty Module terms the positions found in the Armor Branch.
5. To field verify the Duty Modules identified in the Armor officer positions.
6. To provide a complete set of current Duty Modules revised on the basis of the results produced in items 2, 3, 4, and 5 above.

Under previous contracts a set of Duty Modules has been developed for the Infantry, Ordnance, Quartermaster, and Engineer Branches. Although the primary goal of the current work was to refine and document the methods and procedures for developing and applying Duty Modules to OPMS, it was deemed useful to analyze positions from a new (fifth) Army Branch as well. The Branch selected was Armor. The complete set of current Duty Modules is now applicable across the five Army Branches analyzed to date.

The current contract also offered an opportunity to explore a new and apparently more efficient technique for conducting the on-site job analyses. The technique is substantially different from the one used in previous research contracts (Final Technical Report DAHC-19-71-C-0004 and DAHC-19-73-C-0041, December 1973). The new technique made use of the knowledge of existing Duty Modules to facilitate the observation and analysis of the work performed by job incumbents being interviewed. The revised procedure sought to take advantage of the fact that the analyst was a broadly experienced senior retired combat arms officer thoroughly familiar with the Duty Module procedure and existing Duty Modules. He would select Duty Modules he believed appropriate to the job of the officer about to be interviewed, and would supplement these during the interview with any additional Duty Modules. His choices were based on his Army experiences knowledge of Duty Modules, the position Military Occupational Specialty (MOS),

the incumbent's grade, and unit TOE. This new technique, the results of its use, and recommendations for future use are fully described in the next section "PROCEDURE."

PROCEDURE

Duty Module Development

A team of highly experienced job analysts collected data on selected representative positions in the Armor Branch. The data were collected from the Washington, D.C. area, Fort Bliss, Texas, Fort Hood, Texas, and Fort Knox, Kentucky. A total of 55 job incumbents were interviewed. During this job analysis phase a new technique for job analysis and Duty Module development was examined. The standard procedure for job analysis used previously was to obtain complete information from each of the job incumbents and prepare a comprehensive job description for each position analyzed. Duty Modules were developed by identifying the common elements (tasks) which were consistently associated across positions. The remaining tasks were then combined into additional Duty Modules unique to that position or Branch. Thus, any position analyzed to date could be represented by the appropriate combination of general and specific Duty Modules.

During the latter stages of data collection in DA Contract DAHC-19-74-C-0026, Duty Modules for Engineering and Ordnance Officer Positions, it was felt that procedures for job analysis could be made more efficient and Duty Module development expedited by making use of the increasing skills and knowledge of job analysts. Because they had become very familiar with the existing set of Duty Modules, it was assumed that they could bypass the creation of a comprehensive position description and go right to the end product--describing the position in terms of Duty Modules. This would require that draft development of any Duty Modules and/or the revision of existing Duty Modules to describe the position under analysis be done on site at the time of analysis. Theoretically, this would save the time and expense of development of an intermediate and perhaps unnecessary product--the comprehensive position description. Unfortunately, the reports from the field, based on introspective reports of the job analyst and a review of the process itself, indicate that the new analysis procedure complicated the job interviews and inhibited, rather than facilitated, the development of new Duty Modules. It is recommended that the original procedure be used in any future program conducted by either AIR or the Army.

Field Verification

Once the job analyses and tentative Duty Module refinement were complete, they were subjected to field verification procedures. An independent sample of job incumbents was identified through the study of both TOE and MTOE tables of organization. Survey packets were then prepared for all positions available in each of the units listed below:

FORT HOOD

6th Air Cavalry Brigade (Air Combat)

4th Squadron, 9th Air Cavalry, 6th Air Cavalry Brigade (Air Combat)
Headquarters and Headquarters Troop

A Troop
B Troop
C Troop
D Troop

7th Squadron, 17th Air Cavalry, 6th Air Cavalry Brigade (Air Combat)
Headquarters and Headquarters Troop

A Troop
B Troop
C Troop

2d Armored Division

1st Armored Brigade

2d Armored Brigade

3d Armored Brigade

4th Armored Brigade

2d Armored Battalion, 66th Armor, 2d Armored Division

A Company

B Company

1st Armored Battalion, 67th Armor, 2d Armored Division

Headquarters and Headquarters Company

A Company

C Company

Combat Support Company

2d Armored Battalion, 67th Armor, 2d Armored Division

A Company

C Company

Combat Support Company

3d Armored Battalion, 67th Armor, 2d Armored Division

Headquarters and Headquarters Company

A Company

B Company

C Company

Combat Support Company

FORT BLISS

3d Armored Cavalry Regiment
Headquarters and Headquarters Company
1st Squadron, 3d Armored Cavalry Regiment
Headquarters and Headquarters Troop
A Troop
B Troop
C Troop

2d Squadron, 3d Armored Cavalry Regiment
Headquarters and Headquarters Troop
F Troop
G Troop
H Troop

3d Squadron, 3d Armored Cavalry Regiment
Headquarters and Headquarters Troop
I Troop
K Troop
L Troop

FORT KNOX

7th Squadron, 1st Air Cavalry
Headquarters and Headquarters Troop
A Troop
B Troop
C Troop
235th Aviation Company (Attack Helicopter)

A total of 261 questionnaires were sent out to the incumbents of 39 positions, contained in tank units, reconnaissance units, and air cavalry units. Appendix B presents the results of this survey in terms of positions covered. Each survey packet had an identification number to facilitate assembling should the sheets be separated in handling. Individual packets for each unit at the three stations selected for survey were then mailed directly to the ARI Field Office at each location. ARI personnel at this field office handled the administration of the survey. They distributed the questionnaires, provided orientation, presentations and discussions, answered individual questions, collected questionnaires, verified their completion, and returned the instruments to the research staff. The high return rate (199 out of 261 questionnaires, or 76 percent) is a result of the fine cooperation of the three field offices of ARI.

There are valid explanations for the fact that 24 percent of the questionnaires were dispatched but not completed. The 2d AD 1st Bn 66th Armor had been deployed to Germany on "Brigade 75," and no substitute unit was available for survey. Individual officers in units available for survey were on TDY, and in some cases, positions were vacant due to transfer of officers.

Survey Instruments

Basic survey instruments were the revised Duty Module survey forms. Each listed appropriate tasks selected from the task data bank and provided for the collection of additional data from respondents directly on the form. The revised and updated Modules used were products of both previous Duty Module research and study under this contract. Complete sets of the new series of Modules were provided to ARI under separate cover in October 1975. Each task in this data bank was numbered to facilitate analysis of future survey results and to assist in the development of new Modules resulting from future officer duty position analysis. At the end of this research project, the Duty Modules contained a total of 1648 tasks for commissioned officers. Since tasks were sequentially numbered, those tasks which will be developed in the future can easily be added to the data bank.

The balance of the survey instrument package (Appendix A) included a cover sheet for individual identification data. It is basically the same as cover sheets previously used except that questions requiring individual identity data, i.e., name and Social Security number, have been omitted. In addition to the cover sheet and an instruction sheet, the core Duty Modules for the position being surveyed were included. Additional latitude for coverage was effected by including a complete catalog list of all Duty Modules, and a complete catalog of the Duty Modules themselves was made available at each survey site. A copy of the catalog list is also included in Appendix A.

RESULTS

Armor Officer Positions

The conventional roles of Armor in ground combat, using heavy vehicles and weapons in attack and defense and lighter vehicles and weapons in performing reconnaissance and screening, are very similar to the roles of Infantry in ground combat.

The officer requirements for leadership, supply and resupply, planning, supervision, communications, evacuation, etc., found in Infantry Branch positions also exist in Armor Branch positions. Techniques differ and the importance of some functions may differ, but the individual tasks and therefore the Duty Modules applicable to one Branch appear to be applicable to the other. This similarity is clearly shown in Appendix B.

The Air Cavalry Combat units, however, did not appear to be a part of the Armor Branch. They seemed more closely related, with regard to mission, to Air Force Tactical Air Units which provide close air support, air cover, and reconnaissance. The officer grade structure in Air Cavalry units is also different since aircraft pilots are commissioned officers or warrant officers and are organized in squadrons, troops, platoons, and sections. The result is that platoon leaders are captains and troop leaders are majors. Survey results (Appendix B) appear to indicate the need for an additional unique Duty Module describing primarily the aerial fire support role and air combat tasks. Officers surveyed generally rejected combat Modules that were included a priori as "Core Modules," thus leaving a somewhat incomplete job description in the modules they did accept. Since many Air Cavalry units are still in a developmental stage, data received from the field verification should not be used for any definitive revisions to the Duty Module structure. When Duty Module development continues, the possibility of a Module to fill this void needs to be carefully considered.

Duty Module Revision

In the final report for Contract DAHC-19-74-C-0026, Design and Validation of Additional Duty Modules for Engineer and Ordnance Officer Positions, it was pointed out the Duty Module 0-A-1 needed further consideration. As a result of the data gathered during that research and the current survey results, a new Duty Module, 0-A-2, dated January 1976, was designed. Originally, 0-A-1 was designed for unit commanders; it included those administrative tasks that most unit commanders perform at most levels. 0-A-2, on the other hand, was prepared for officers occupying staff and similar positions other than command, and contained most of the tasks performed by most of these officers. However, many of the tasks in 0-A-1 were identical with those in 0-A-2, except for inclusion of the descriptive word "unit" in the 0-A-1 task lists. The similarity between the two Modules has caused confusion when position incumbents compare one Module to the other before making a selection. Analysis during the interview phase of this project revealed that some unit commanders preferred Module 0-A-1, while others thought 0-A-2 was more suitable. Moreover, it was found in the survey phase that some confusion arose when the incumbents had difficulty determining which Module had more tasks applicable to their positions.

For the reasons described above the two Modules have been combined into a single Module that includes all the tasks previously contained in both, but with the word "unit" omitted. The new Module has been given the number and title of the previous Module 0-A-2, and is presented on the following page. The new Module is expected to remedy the problems that have been experienced to date.

AIR Duty Module Survey Form (Rev 1974)

Identification No. _____

 Date: **January 1976**

Code: _____

DUTY MODULE 0-A-2 Performs general administration	(8) Direct	(4) Supervise	(3) Do and supervise	(2) Do	(1) Assist	(0) Not applicable
0014 Prepare administrative SOPs and instruction.						
0015 Monitor security of classified documents.						
0003 Prepare and review administrative correspondence, memoranda, and reports.						
0006 Establish and monitor arrangements for collection and distribution of mail within unit.						
0008 Screen incoming correspondence and distribute for action or information.						
0017 Establish and operate suspense system.						
0018 Authenticate orders and official correspondence.						
0019 Establish and post files of records and regulations.						
0012 Review, interpret and apply directives and information.						
0020 Schedule appointments, conferences, and other such activities.						
0021 Provide for reproduction and duplication services.						
0004 Prepare and review unit journal, historical records and morning report (or change reports for centralized systems).						
0005 Administer unit funds.						
0007 Establish and operate unit message center.						
0013 Prepare daily bulletin or similar publication.						

1. DO MODULE AND TASKS APPLY TO YOUR POSITION.	(0) Not applicable	(1) Little applicability	(2) Several of tasks	(3) Majority of tasks	(4) All of tasks		
a. In actual or simulated combat operations and support?							
b. In garrison and other than a?							
2. PERCENT OF TOTAL TIME SPENT ON THIS DUTY MODULE	(0) Not applicable	(1) 1-9%	(2) 10-29%	(3) 30-49%	(4) 50-69%	(5) 70-89%	(6) 90-100%
a. In actual or simulated combat operations and support?							
b. In garrison and other than a?							
3. RELATIVE CRITICALITY OF THIS PART (MODULE) TO ENTIRE JOB	(0) Not applicable	(1) Least critical	(2) Average	(3) Critical	(4) The most critical		
a. In actual or simulated combat operations and support?							
b. In garrison and other than a?							

Survey Respondents

The research conducted under the current contract was directed totally toward Armor officer positions in Armored tactical units. This area had not been covered by previous Duty Module research efforts. It must be pointed out, however, that Armor Branch officers, like those in Infantry, Ordnance, Engineer, and Quartermaster Branches, also are assigned to positions in TDA organizations. These positions have been described in previous studies and include areas such as DA, FORSCOM, TRADOC, Army and Corps Staffs, National Guard, Reserve, and ROTC Advisors, Recruiters, R&D, Service School and College Instructors, and many others.

Within the Armor Branch tactical units surveyed during field verification it is interesting to note that there were eight different OPMS Specialties identified by position incumbents. The following chart shows the distribution by grade and specialty verification of survey respondents. Of 199 total respondents, 79 percent were in positions classified as Armor Specialty (see Table 1).

Table 1

Specialty Area	FIELD VERIFICATION ARMOR POSITION SURVEY GRADE						TOTAL
	2LT	1LT	CPT	MAJ	LTC	COL	
7 Aviation ^a		5	8	1			14
12 Armor	7	58	58	28	6	1	158
14 Air Defense Artillery	1	3					4
35 Tactical/Strategic Intelligence			5				5
54 Operations and Force Development			1	2	2		5
71 Aviation Materiel Management			5	1			6
77 Tank/Ground Mobility Materiel Management			1				1
99 Logistics Specialty		2	3	1			6
Totals	8	68	81	33	8	1	199

Note:

- a. During the course of this contract effort, decision was made at Department of Army level to designate Aviation as a Specialty. It is probable that "15" will be the number applied to this Specialty. However, the number used above is "7", which was applicable when much of the work under this contract was performed, and has been used in previous similar research.

Knowledge and Competency Requirements

Of additional interest to this current contract was the exploration of possible means for including scales in the job analysis procedure to reflect both the level of knowledge and the level of competency required by an incumbent to fulfill a given job requirement. It was anticipated that such procedures would include at a minimum an ordering of the importance of separate tasks within the Duty Modules of which they are part, though more complex model would be examined. The preliminary efforts in this aspect of the research indicated that the issues were far more complex than they appeared on the surface. There actually seem to be three separate facets of the problem of reflecting levels of knowledge and competence in scalar form:

First, two separate scales appear to be necessary to reflect the average level of participation in a particular Module. "Direct" and "supervise" levels actually involve leadership and management skills and are on an entirely different continuum than the skills needed to "Do" or participate in a particular task within a Module.

Second, individual tasks within a Module may vary in required knowledge and competency as that Module is used in different jobs at varying levels of preciseness and in varying levels within an organizational structure. As an example, Task 0014, "Prepare administrative SOP and instructions" (Duty Module O-A-2), is considerably more complex at division level than at company level. The Module in which this task is found is useable at all levels of organizational structure.

Third, the "criticality" or significance of each task varies from position to position. As an example, Task 0015, "Monitor security of classified documents," may be a critical function in one position and only an auxiliary duty in another.

The level of overall competence required to perform a particular task in a Module is at least partially revealed by the incumbent when he checks one of the options in the "Do" or "Don't Do" scale of the now existing

Duty Module survey form. Obviously, if "Don't Do" is checked, no competence is involved. This is shown in Appendix C, where the columns numbered one through five show the various options which a job incumbent can check to indicate the capacity in which he performs each task. Certainly the columns labeled "Assist", "Do", and "Do and Supervise" are three ascending levels of task competence. Options 4 (Supervise) and 5 (Direct) are less clear as levels of competence. Generally, the option "Supervise" is associated with the job function performed by a first-line supervisor who is in direct contact with the journeyman-level worker. Studies have shown that this level of job competence is generally above that of the journeyman-level, but not necessarily above that of the "Chief", "Head", or "Lead" journeyman who presumably checks the third column "Do and Supervise." However, the first-line supervisor also has an additional skill, that of supervision. This is added to a technical skill required, bringing a new dimension to the task.

The question of competence becomes even more problematic at the fifth column level (Direct) where the incumbent who checks this column is responsible for the task activity, but is in contact with the journeyman-level worker only through a first-line supervisor. "Directing" is a totally different skill which can be employed over a wide variety of tasks, many of which the "Director" cannot or does not perform himself. Although the "Director" and the "Supervisor" are not necessarily one step up in level of competence in performing the task, it is most likely that their overall skill is higher than that of the journeyman or doer. In summary, the four options for an incumbent who performs a task show four generally ascending levels of competence, even though the skill and knowledge base may shift after the first two from pure task competence to managerial competence. As only experimental work has been done in this area, it is not known whether additional levels of competence exist, or, if isolated, provide additional input for decision making.

As can be seen by examining Appendix C, a scale for registering the importance of a task to the entire Duty Module has also been experimentally added. Field work done to date, consisting only of numerous discussions

with incumbents and commanders, seems to indicate that task importance tends to vary with the current situation in the unit being surveyed. For example, if a particular unit has just been inspected by the I.G. and found deficient in maintenance of equipment log books, the task checked as most important by an incumbent surveyed immediately after the inspection will be that task most directly related to upkeep of maintenance logs. If the unit has just been reprimanded for not having its supply records up to date, the item checked as being most important will be that one having to do with supply records upkeep. It therefore seems questionable that a meaningful rank order system of rating task importance be used. Differentiating broad variations in task importance may be feasible, and would seem to give better results. As a consequence, a scale of three steps only has been designed and is shown in Appendix C. While possessing greater rationale than a rank order system, the usefulness of even this three-step scale may be in question. Only a task that is important should be put on the survey form; tasks that are not essential to job performance and description can be safely ignored. In the Duty Modules developed to date, all the tasks are important. To apply a rank order system of rating to such tasks would tend to obscure any basic differences since all tasks used are considered significant in the Module.

In returning to a consideration of the first item discussed above, that of the knowledge required to perform a task, or the combination of tasks grouped into a Module, an even more complex situation must be dealt with. "Knowledges," or descriptions of required knowledge, have not been developed for the Duty Modules as they now stand. Furthermore, many knowledges required of a person performing a job may be specific to a particular position in a particular setting. It is thus difficult, if not impossible, to generalize these more precise knowledges in the same way that tasks can be generalized into a Duty Module. Other required knowledges are broader in nature and can be generalized to the degree suitable for association with a Duty Module. Still other knowledges required by a job may be so broad that they transcend the scope of the average Duty Module and apply to a host of Modules. The current research effort was unable to explore the area of knowledge and competency other than to design one instrument and

develop a primitive rationale. Further research is necessary to determine if it is possible to quantify knowledge and competency by tasks and/or Duty Modules.

Job knowledges are usually developed from job analysis data arising from a field job analysis program. Many of the job schedules currently in the files of ARI and AIR, which were developed in conjunction with the basic work on Duty Modules, contain job knowledges or task information that allows inference of knowledges by a skilled job analyst or a group of subject matter experts. Job knowledges can also be gleaned from ancillary materials such as training curricula, performance standards, or test items. However, the validity of such a procedure is often suspect if the knowledges cannot be directly tied into job analysis data.

In order to experiment with job knowledges as related to Duty Modules, AIR selected a sample position and constructed a knowledge scale and a survey form to accompany it. These are shown in Appendix D. The first sheet shows identification information for the position and the definitions of the steps in the knowledge scale. The second and third sheets show a partial list of the knowledges required of the sample position, that of Tank Battalion Motor Officer. The Duty Modules which cover the job of Tank Battalion Motor Officer are shown in Appendix E for reference purposes. The knowledges were drawn from field job analysis schedules on hand and relevant training courses. It is apparent that job knowledges are not related to tasks on a one-to-one basis, and may not be so related on a Module basis. In some cases a particular task may require three or four knowledges; in other cases a single knowledge may subsume a number of tasks.

Experimentation with the Duty Module form to date has revealed that:

- a. incumbents have little difficulty understanding or using the form;
- b. knowledges vary widely in scope and specificity;
- c. knowledges may not need to have any direct relationship to the tasks of a Duty Module to be useful;
- d. skills, in the sense of physical and motor abilities such as flying a helicopter, are associated with knowledges, but distinctly different in nature.

It should be noted that no field work has been done with techniques and procedures pertaining to knowledge and competency requirements other than that which could be accomplished on a pilot basis locally. Obviously, if further development in this area is desired, a thorough field test of a selected sample of jobs should be undertaken.

CONCLUSIONS

It appears from the verification survey of Armor officer positions that Duty Modules as previously designed and as revised in this research effort are applicable for the most part for Armor officers as well as for those in the four branches previously studied.

In addition to the Final Report, other key documents were prepared under this contract. They were directed at providing the Army with the knowledge and tools necessary for applying the Duty Module System. These products were:

1. Army Officer Duty Module Manual, dated October 1975. The purpose of this manual is to explain the steps that have been taken in developing the Duty Modules to date and integrating them into the basics of an operational system, and to describe the procedures necessary to complete the coverage for the rest of the Army. Additionally, procedures necessary to review and update the Duty Module System, once basic coverage is completed, are provided.
2. Task Data Bank, Task Index, dated November 1975. This Index has been constructed so that the tasks for the current Duty Modules are accessible as new officer positions are analyzed. The use, where appropriate, of existing Task Statements will insure standardization and facilitate the future application of the Duty Module System.
3. Task Data Bank, Task List, dated October 1975. This List assigns a sequence number to each task used thus far in Duty Module design. The List also shows in which Module or Modules a particular task was used. The sequence of the list approximates the current grouping and sequencing of existing Duty Modules. Such sequencing will assist initially in a manual search for appropriate tasks in future Duty Module design. At a future date, when Item No. 2 above is automated, such a sequence system will no longer serve a purpose and may be dropped.
4. Catalogue of Army Officer Duty Modules, dated October 1975. This indexed catalogue contains a copy of every Duty Module designed under

this and previous research contracts. Each module is assigned a letter and a number. The letter indicates the work area, such as Administration, Intelligence, Operations, etc., in which the Module belongs. The number is merely a sequence number within the particular work area.

5. Keypunch Deck, dated January 1976. This includes a set of keypunch cards containing the data collected in the field verification and the accompanying coding sheets. The organization of the data deck is compatible with that of coded data submitted under previous contracts for the other four Branches (Infantry, Quartermaster, Engineer, and Ordnance).

Individual Survey Identification Number _____

PART I--IDENTIFICATION DATA, TO BE COMPLETED BY INCUMBENT AS FIRST STEP:
(Please print or use typewriter; legible entries are essential.)

Position title _____

Organization/unit _____

Station _____ Zip code _____

Your grade _____ Your branch _____ Your primary OPMS Spec. _____

Position grade _____ Pos. branch _____ Pos. OPMS Spec. _____

TOE No. _____ or TDA No. _____

Date _____

PART II--TO BE FILLED OUT BY INCUMBENT ON COMPLETING DUTY MODULE FORMS:

1. Did you obtain and attach any additional Duty Modules selected from the Catalogue List?
 - a. No _____
 - b. Yes _____, I added the following _____ (List by module number).
2. Did you mark "Not Applicable" on any Duty Modules initially issued to you?
 - a. No _____
 - b. Yes _____, the following _____ (List by module number).
3. Do the attached Duty Modules (including any you added but excluding any marked "Not Applicable") fit your position (primary duty assignment) and reasonably describe the essentials of the duties indicated? (See Note below*)
 - a. Yes _____
 - b. No _____ (If "No", explain on back of this sheet.)
4. What estimated percentage of your total working time is accounted for by your attached Duty Modules?
 - a. In actual or simulated combat operations and support? _____%
(Omit a if it is inapplicable or you feel unable to estimate.)
 - b. In garrison and other than a? _____%
5. Besides the Duty Modules attached, do you still need other Duty Modules to cover the significant duties of your position (primary assignment)? (See Note below*)
 - a. No _____, the attached Duty Modules suffice.
 - b. Yes _____, I need other modules, which I indicate on the back of this sheet.

*Note: In your analysis, ignore minor local variations, miscellaneous minor common tasks such as PT, and extra duties not integral to the position, such as serving as duty officer, on special projects, etc.



AMERICAN INSTITUTES FOR RESEARCH
IN THE BEHAVIORAL SCIENCES

3301 New Mexico Avenue, NW, Washington, DC 20016 • 202/686-6800

Project 51200

October 22, 1975

MEMORANDUM FOR: ARMY OFFICERS PARTICIPATING IN DUTY MODULE FIELD SURVEY

This field survey is part of a research project being conducted by the American Institutes for Research (AIR) on contract for the Department of the Army. AIR is developing an experimental concept, revolving around the use of "Duty Modules," for describing and grouping work activities of Army personnel.

A Duty Module consists of a cluster of related tasks, comprising a distinctive and relatively self-contained component of a job. An officer's duty position usually will contain several Duty Modules, each describing a specific cluster of tasks. Similar task clusters found in different positions are described in a common Duty Module. It should be possible to describe the significant duties of any given position by using a distinctive combination of Duty Modules, like building blocks.

After a thorough study of the job content of Army positions, AIR research analysts have developed a number of experimental Duty Modules for certain categories of officer positions. As a participant in the survey phase of this project, you will be asked to identify and evaluate Duty Modules applicable to your position (primary duty assignment) and to answer some questions about how they relate to your position.

The data you provide are for research purposes only and will not in any way become part of your DA personnel files; do not include your name.

Your cooperation in this research for the Army is appreciated.

Instructions follow on the next page.

INSTRUCTIONS

Project Materials

Attached are the following project materials. Please examine and check them against the list below.

- A. COVER SHEET. This is divided into two parts: Part I, for you to provide identification data; and Part II, for you to fill out after reviewing attached Duty Module Forms. In the right corner of this sheet is an Individual Survey Identification Number assigned to your forms. On the back is space for any comments.
- B. CATALOGUE LIST OF OFFICER DUTY MODULES. This is a list of experimental Duty Modules for various functions in a variety of officer positions.
- C. DUTY MODULE FORMS. These are a group of experimental Duty Modules in field survey form which have been attached by the contractor to survey your position. In the top right corner, each Duty Module form should have the same Identification Number as your Cover Sheet.

Procedure

- 1. Fill in Part I of your Cover Sheet. Please type or print legibly.
- 2. Look over the Catalogue List of Officer Duty Modules to familiarize yourself with the kinds of Duty Modules therein and to identify tentatively those applicable to your position, subject to the more detailed examination in the steps below.
- 3. Examine all the Duty Module Forms already attached for you, to see if they apply to your position and cover its significant functions. If a Duty Module is not applicable in any significant degree to your current position in either (a) actual or simulated combat operations or (b) garrison or other circumstances, then print "NOT APPLICABLE" in large letters across the face of the form and disregard the rest of that form.
- 4. If you consider other Duty Modules necessary to cover the significant functions of your position, then select them from the Catalogue List of Duty Modules, insofar as applicable. (In considering modules with overlapping content, use only the one that fits best. Do not seek modules for minor common activities or miscellaneous duties not integral to your position.) If Duty Modules in the Catalogue List are not available to you, list on the back of your Cover Sheet any additional Duty Modules you would need. Similarly, you can also use that space to describe any further Duty Module requirements of your position beyond the Duty Modules in the Catalogue List.
- 5. Fill out each Duty Module Survey Form which is applicable to your position (either on the basis of present job performance or estimated requirements under operational conditions), as follows:

a. For each listed task applicable to you, mark an "X" next to it in the appropriate right-hand column. Make no mark for a task which does not apply to your position. (Note: In the column headings, "supervise" means person-to-person, continuous supervision of immediate subordinates, as in the relationship of a rating officer to rated officer. "Direct" means actively directing from one echelon higher than "supervising," as in the usual relationship of an indorsing officer to rated officer.)

b. If changes or additions to the task statements are needed, please write any suggestions on the face or back of the Duty Module forms.

c. Fill out also the lower portion of each Duty Module Survey Form, by placing an "X" in the appropriate box on each line. There are two lines per question. See below.

(1) Notice that each of the three question items relates to two different circumstances - (a) "In actual or simulated combat operations and support," and (b) "In garrison and other than a." In many cases your answers may be quite different under these two different circumstances.

(2) If your position is in a non-deployable unit and would not involve actual or simulated combat operations, then for Question 1, Line a, simply mark Block 1 (indicating little or no applicability), and disregard Line a of Questions 2 and 3. Conversely, if the module applies only in actual or simulated combat operations or support, never otherwise, simply mark Block 1 of Question 1, Line b, and disregard Line b of Questions 2 and 3.

(3) In answering Question 2 (Time Spent on Module), you should reflect your own actual performance when applicable, but if the module would apply to your position in combat operations you will have to estimate that time, if you can, on the basis of experience and training.

(4) In answering Question 3 (Relative Criticality of Module), only one of your modules should be marked as "least critical" and one as "most critical".

6. Go back to the Cover Sheet and complete Part II as indicated. Use the back of the Cover as needed.

CATALOGUE LIST OF ARMY OFFICER DUTY MODULES
(BY AREA)

A. COMMAND MANAGEMENT, GENERAL MANAGEMENT, AND ADMINISTRATION

- 0-A-2 Performs general administration
- 0-A-3 Exercises military command authority
- 0-A-5 Supervises a staff section, detachment, or office
- 0-A-6 Performs headquarters management staff functions
- 0-A-7 Performs special staff administrative and adjutant type functions
- 0-A-8 Directs, coordinates, and supervises a staff
- 0-A-9 Performs executive staff secretariat functions
- 0-A-10 Counsels and evaluates subordinates as troop leader and takes action on personal problems
- 0-A-11 Supervises troop appearance and care and maintenance of materiel and facilities in unit
- 0-A-12 Performs overall programming evaluation and review staff work
- 0-A-13 Performs management analysis staff functions

B. PERSONNEL

- 0-B-1 Performs manpower management staff functions
- 0-B-2 Performs personnel management staff functions
- 0-B-3 Performs staff functions pertaining to personnel services
- 0-B-4 Performs officer personnel management functions at departmental level
- 0-B-5 Directs or coordinates postal services for an installation or command

C. INTELLIGENCE

- 0-C-1 Performs combat intelligence staff functions
- 0-C-2 Performs counterintelligence and security staff functions in a general staff or coordinating staff
- 0-C-3 Performs foreign area strategic intelligence staff functions
- 0-C-5 Performs aerial surveillance staff functions in a general staff or other coordinating staff
- 0-C-6 Performs intelligence staff functions concerning ground reconnaissance and surveillance
- 0-C-7 Directs and conducts operations of counterintelligence unit
- 0-C-8 Conducts military intelligence collection operations in the field

D. OPERATIONS AND PLANS (STAFF)

- 0-D-1 Performs operations staff functions in a General Staff or other coordinating staff
- 0-D-2 Performs operations planning staff functions in a General Staff or other coordinating staff
- 0-D-3 Performs air support staff functions in a General Staff or coordinating staff
- 0-D-4 Coordinates fire support for unit tactical operations
- 0-D-6 Directs school troop unit operations at a service school center

E. ORGANIZATION, TRAINING

- 0-E-1 Trains troops and/or civilian employees in units and activities
- 0-E-2 Performs training staff functions
- 0-E-3 Performs force development functions in general staff or other coordinating staff

F. LOGISTICS (STAFF, CONSUMER UNITS, AND COMPOSITE COMBAT SUPPORT COMMAND)

- 0-F-1 Performs supply operations at consumer unit level
- 0-F-2 Performs supply staff functions
- 0-F-3 Performs equipment maintenance and readiness staff functions in a general staff or other coordinating staff
- 0-F-4 Performs transportation staff functions in a general staff or other coordinating staff
- 0-F-5 Performs logistical services staff functions in a general staff or other coordinating staff
- 0-F-6 Performs staff functions pertaining to motor vehicle maintenance and operations
- 0-F-7 Performs general logistics staff functions
- 0-F-8 Performs staff functions concerning procurement of materiel
- 0-F-10 Reviews, processes, and coordinates military construction budgetary planning and programming at Major command or departmental level
- 0-F-11 Plans, staffs, and coordinates military base and facility engineering requirements
- 0-F-12 Directs and controls operations of a combat support command or comparable composite combat service support organization

G. COMMUNICATIONS AND ELECTRONICS

- 0-G-1 Serves as Battalion or Brigade Communications Officer
- 0-G-2 Performs communications-electronics (CE) staff functions
- 0-G-3 Directs and controls operations of mobile communications support unit

- O-G-5 Establishes and controls mobile area signal center
- O-G-6 Manages communications-electronics facilities and services at major command post or operations center
- O-G-7 Directs and controls fixed telecommunications center
- O-G-8 Establishes and controls communications-electronic services for military posts and comparable fixed installations

H. CIVIL-MILITARY AFFAIRS

- O-H-1 Performs civil-military staff functions
- O-H-2 Plans and controls civil affairs operations
- O-H-3 Plans and coordinates psychological warfare operations
- O-H-4 Performs attache type intelligence functions

I. COMPTROLLERSHIP AND PROGRAM/PROJECT/PRODUCT MANAGEMENT

- O-I-1 Performs program and budget staff functions
- O-I-3 Conducts cost studies and analyses of financial management
- O-I-6 Develops and designs budgetary methods and procedures for financial management systems

J. ARMY AVIATION

- O-J-1 Performs Army aviation staff functions
- O-J-2 Pilots rotary wing aircraft
- O-J-3 Pilots fixed wing aircraft
- O-J-4 Directs and controls Army aircraft maintenance
- O-J-5 Performs Army aviation safety duties

K. RESEARCH, DEVELOPMENT, TEST, AND EVALUATION

- O-K-1 Performs staff functions pertaining to research, development, test, and evaluation of new equipment and materiel
- O-K-2 Conducts service or operational test and evaluation of new equipment and materiel
- O-K-3 Coordinates test and evaluation of new equipment and materiel
- O-K-6 Coordinates or conducts research, development, and engineering for developmental materiel or system
- O-K-7 Performs or assists in overall life-cycle management of special materiel project or product

L. OPERATIONS RESEARCH AND SYSTEMS ANALYSIS

- O-L-1 Performs operations research analysis

M. ADP MANAGEMENT AND PROGRAMMING

- O-M-1 Performs ADP staff functions

N. EDUCATION, INSTRUCTION

- O-N-1 Prepares and conducts formal instruction in a school
- O-N-2 Conducts ROTC activities at civilian education institution
- O-N-3 Prepares doctrinal or formal instructional publications

O. INFORMATION ACTIVITIES

- O-O-1 Performs public information staff functions
- O-O-2 Assembles and prepares materials for command information or troop information activities
- O-O-4 Manages television or radio station of the Armed Forces Radio and Television Service

P. AUDIO-VISUAL ACTIVITIES

- O-P-1 Manages various audio-visual services for a major installation or activity
- O-P-2 Produces taped television or motion picture films for instructional or information purposes

U. TACTICAL DIRECTION OF COMBAT UNITS

- O-U-1 Directs and controls employment of Infantry and Armor maneuver unit
- O-U-2 Directs and controls mortars
- O-U-3 Directs and controls tactical employment of reconnaissance and scout unit
- O-U-4 Directs and controls heat seeking type air defense weapons (Redeye)
- O-U-5 Directs and controls antitank elements
- O-U-6 Participates individually and directly in ground combat

W. MISCELLANEOUS

- O-W-1 Provides personal assistance to general officer
- O-W-2 Directs and leads honor guard unit and performs staff functions pertaining to ceremonies
- O-W-4 Performs unit liaison activities
- O-W-5 Performs Inspector General staff functions
- O-W-6 Performs military history staff functions
- O-W-7 Provides advice and assistance for Army reserve components
- O-W-9 Represents US forces in military standardization activities with other countries

X. INDIVIDUAL FUNCTIONS AND SPECIAL QUALIFIERS

- O-X-2 Participates in airborne operations as a parachutist (MOS SQI prefix 7)
- O-X-3 Performs specialized nuclear weapons effects analysis (MOS SQI prefix 5)

AA. AIR DEFENSE ARTILLERY

- O-AA-1 Directs and controls employment of light air defense artillery weapons
- O-AA-2 Directs and controls HAWK type air defense launchers and missiles

BB. FIELD ARTILLERY

- O-BB-1 Directs and controls employment of field artillery cannon firing battery
- O-BB-4 Performs field artillery reconnaissance and survey
- O-BB-5 Performs field artillery target acquisition

CC. MILITARY POLICE, LAW ENFORCEMENT, CRIMINAL INVESTIGATIONS

- O-CC-1 Serves as Provost Marshal
- O-CC-2 Controls and participates in military police operations
- O-CC-4 Directs and operates a military confinement facility
- O-CC-5 Directs, controls, and participates in operation of criminal investigation unit
- O-CC-6 Directs and operates criminal information center or system

EE. ENGINEERING

- O-EE-1 Directs and controls combat engineer unit
- O-EE-2 Directs and controls portable bridging
- O-EE-3 Directs and controls mobile water supply point unit operations
- O-EE-4 Directs and employs atomic demolitions (ADM)
- O-EE-5 Serves as engineer staff officer
- O-EE-7 Directs and controls engineer construction or heavy equipment unit
- O-EE-8 Designs, plans, and monitors construction projects for military engineer units
- O-EE-9 Directs and controls facilities engineering services for an installation
- O-EE-10 Prepares terrain study material
- O-EE-11 Conducts engineering surveys
- O-EE-12 Manages field production or revision of topographic and photographic military maps
- O-EE-13 Performs on-site supervision of engineer contract construction projects, and related contract administration
- O-EE-14 Coordinates military construction activities in an engineer district
- O-EE-15 Provides resident engineer district representation and services at a military installation
- O-EE-16 Conducts engineer oriented strategic studies and analyses
- O-EE-17 Plans, constructs, and maintains military pipeline system

FF. LOGISTICAL SERVICE OPERATIONS (SPECIALIZED)

- 0-FF-1 Manages installation commissary
- 0-FF-3 Manages officers' open mess
- 0-FF-4 Performs food service and advisor staff functions
- 0-FF-5 Directs and controls operation of mobile field laundry and bath units
- 0-FF-6 Directs and controls support service unit or activity
- 0-FF-7 Performs purchasing and contracting functions under the Armed Services Procurement Regulations
- 0-FF-8 Directs and controls field mortuary and cemetery activities
- 0-FF-9 Manages materiel supply control for one or more commodities within an organization or activity
- 0-FF-10 Performs staff and operating functions concerning property disposal
- 0-FF-11 Performs contract administration functions under the Armed Services Procurement Regulations
- 0-FF-12 Coordinates materiel production and procurement activities for a major project or program
- 0-FF-13 Oversees contractor-operated munitions plant
- 0-FF-14 Directs a unit engaged in explosive ordnance disposal operations
- 0-FF-15 Performs explosive ordnance disposal staff functions
- 0-FF-16 Directs and controls chemical combat support
- 0-FF-17 Performs chemical staff functions in a combat or combined arms organization

GG. TRANSPORTATION (OPERATIONS AND SPECIALIZED FUNCTIONS)

- 0-GG-1 Coordinates military passenger traffic and movement operations
- 0-GG-2 Performs staff management and coordination of military cargo shipments to and from overseas
- 0-GG-3 Coordinates cargo handling operations at military ocean terminal
- 0-GG-4 Directs or coordinates operations of deployable water terminal operating unit
- 0-GG-5 Directs and controls operations of amphibious truck unit
- 0-GG-6 Directs and controls operations of transportation truck unit
- 0-GG-7 Performs highway traffic engineering staff functions

HH. SUPPLY AND MAINTENANCE SUPPORT OPERATIONS

- 0-HH-1 Directs parachute maintenance and aerial delivery equipment support
- 0-HH-2 Directs and controls petroleum supply unit
- 0-HH-3 Directs and controls supply unit or activity
- 0-HH-6 Supervises division heavy drop support
- 0-HH-8 Directs and controls repair of non-missile equipment

- 0-HH-9 Supervises storage and warehouse operations
- 0-HH-10 Directs and controls support maintenance for artillery missile systems
- 0-HH-11 Directs and controls machine shop and metal-working
- 0-HH-12 Directs and controls special ammunition combat service support operations
- 0-HH-13 Exercises staff supervision and technical control over maintenance support operations
- 0-HH-14 Performs technical parts supply staff function
- 0-HH-15 Manages parts supply activities or units
- 0-HH-17 Directs and controls conventional ammunition supply and storage operations
- 0-HH-20 Coordinates large-scale bulk POL movement and storage operations

II. FINANCE

- 0-II-1 Performs finance and accounting functions
- 0-II-2 Performs financial services staff functions for a deployable command

KK. CRYPTOLOGY, SPECIALIZED SIGNAL INTELLIGENCE AND SECURITY OPERATIONS, AND ELECTRONIC WARFARE

- 0-KK-1 Directs and conducts ground signal surveillance, intercept, intelligence, and related electronic warfare operations
- 0-KK-2 Directs and conducts airborne signal intelligence operations
- 0-KK-3 Directs, conducts, and/or performs specialized cryptologic functions
- 0-KK-4 Performs functions concerning Electronic Warfare (EW) in a general staff

APPENDIX B

The following table lists the various Armor positions covered in the validation survey. Responses were received from 199 incumbents, from a field that encompassed 28 types of positions.

Neither the aviation modules of the J-series nor the combat unit Modules of the U-series (except for the Module O-U-1 concerning employment of Armor units, which is appropriate for all Armor unit commanders) have been included as "Core Modules" for unit commanders. This is because there are a large number of incumbents (43) occupying positions of command in a wide variety of units; units range in size from the brigade level down, and in type from Air to Ground and Service.

It can be noted that more of the modifications suggested by position incumbents apply to rejection of Modules than to Module addition. This can be explained by the survey method. Modules considered applicable were attached to the questionnaires; thus, they were readily available for analysis by the incumbents. Modules that might be candidates for addition were much less accessible. Books of these other Modules, as well as extra copies of the ones expected to be needed, were sent to all posts. However, it is possible that all respondents did not find them readily available. A catalog of Modules giving number and title only was included with each questionnaire, but incumbents understandably might have hesitated to add a Module without being able to review the actual tasks it contained.

The survey revealed a variation in tasks applicable for Armor units with a primary ground combat mission and for those equipped with helicopters and having a mission of air attack or reconnaissance. The air-type Armor units are relatively recent organizations; it is expected that developmental modifications will continue rapidly, both to improve the units' offensive capabilities, and to counter probable enemy measures to reduce their effectiveness. Modifications in the organization's jobs are reflected in the problems associated with obtaining precise job content based on position comparability. For example, air-type units of troop/company size surveyed

are generally authorized a position of Operations Officer; this position includes many of the functions expected of an Executive Officer. However, many of the duties of this position differ from those of the Executive Officer found in other units. Accordingly, a separate position has been established in the following table for the Operations Officer, and applicable Duty Modules have been assigned.

SURVEY BY POSITIONS

Code/Position	Nr. of Off.	Core Modules ^a _b		Significant Variations ^c
001 Commander of Unit	43	A-1, A-3, A-10, A-11, E-1, U-1		-----
007 Executive Officer	16	A-1, A-5, A-8, A-11		A-5 (3 rejections) ^e
010 G1/S1 or S1/Adj	2	A-2, A-5, A-10, B-1, B-2, E-1		-----
020 G3/S2	5	A-2, A-5, C-1, C-2, C-6, E-1, X-3		X-3 (4 rejections) ^f
030 G3/S3	12	A-2, A-5, D-1, D-2, E-1, E-2, E-3		E-2 (4 rejections) ^g E-3 (7 rejections) ^g
032 Asst. G3/S3 (Air)	1	A-2, D-3, D-4, E-1		-----
040 G4/S4	5	A-2, A-5, F-2, F-3, F-5		E-1 (1 added)
041 Asst G4/S4	1	A-2, A-5, A-11, F-2, F-4, HH-3		A-11 (1 rejection)
062 Aviation Off. and Aviation Cdr.	3	A-2, A-5, A-10, E-1, J-2, J-5, U-1, U-6		U-1 (3 rejections) ^d U-6 (3 rejections)
098 Liaison Officer	1	A-2, D-1, E-2, W-4		A-2 (rejection)
101 Platoon Leader, Mortar Platoon	2	A-10, A-11, E-1, U-1, U-2, U-6		-----
106 Section Leader, Redeye Section	4	A-10, A-11, E-1, U-4, U-6		-----
130 Platoon Leader, Aero Rifle Platoon	1	A-1, A-10, A-11, E-1, J-2, U-1, U-6		A-1 (1 rejection)
131 Platoon Leader, Aero Scout Platoon	4	A-1, A-10, A-11, E-1, J-2, U-1, U-3		A-1 (1 rejection) ^d U-1 (1 rejection)
132 Platoon Leader, Aero Weapons Platoon	6	A-1, A-10, A-11, E-1, F-1, J-2, U-1, U-6		A-1 (4 rejections) ^d U-1 (1 rejection) U-1 (2 rejections) ^d U-6 (2 rejections) ^d U-3 (3 added) U-5 (2 added)

SURVEY BY POSITIONS (contd)

Code/Position	Nr. of Off.	Core Modules ^a _b		Significant Variations ^c
133 Platoon Leader, Armored Cavalry Platoon	6	A-10, A-11, E-1, U-1, U-6		A-2 (1 added)
134 Platoon Leader, Attack Helicopter Platoon	9	A-1, A-10, A-11, E-1, J-2, U-1, U-6		A-1 (3 rejections) U-1 (3 rejections) ^d U-6 (3 rejections) U-5 (2 additions)
135 Platoon Leader, Scout Platoon	6	A-10, A-11, E-1, U-1, U-3, U-6		-----
136 Platoon Leader, Service Platoon	11	A-1, A-10, A-11, E-1, F-1, J-2, J-4, U-1, J-6, FF-6, HH-3, HH-8		F-1 (3 rejections) U-1 (9 rejections) ^d U-6 (5 rejections) FF-6 (4 rejections) HH-3 (2 rejections) ^h HH-8 (3 rejections)
137 Platoon Leader, Support Platoon	7	A-10, A-11, E-1, F-4, U-1, U-6		F-4 (1 rejection) ^d U-1 (4 rejections) ^d Food, ammunition, and POL Modules requested by ^{3h}
138 Platoon Leader, Tank Platoon	9	A-10, A-11, E-1, U-1, U-6		-----
140 Section Leader, Scout Section	14	A-10, A-11, E-1, J-2, U-1, U-6		U-1 (4 rejections) ^d U-6 (7 rejections)
141 Section Leader, Aero Weapons Section	11	A-10, A-11, E-1, J-2, U-1, U-6		U-1 (5 rejections) ^d U-6 (3 rejections) D-4 (2 added) U-5 (2 added)

SURVEY OF POSITIONS (contd)

Code/Position	Nr. of Off.	Core Modules ^a ^b	Significant Variations ^c
144 Section Leader, Transp. Section	4	A-10, A-11, E-1, J-1, J-2, J-4, J-5, U-6	J-5 (1 rejection) U-6 (2 rejections) ^d
146 Section Leader, Attack Helicopter Section	1	A-10, A-11, E-1, J-2, U-1, U-6	U-6 (1 rejection) ^d
147 Team Leader, Scout Team	6	A-10, A-11, E-1, J-2, U-1, U-6	U-1 (3 rejections) ^d U-6 (2 rejections)
200 Motor Officer	2	A-2, F-6, HH-8	-----
203 Operations Officer, Air Cavalry Unit	7	A-2, D-1, D-3, E-1, E-2, J-1, J-2, J-5	U-3 (3 added)

Notes:

- The "Core Modules" throughout this list, unless otherwise explained, are those found applicable for the majority of officers surveyed in the position group.
- A number of Armor positions include Army Aviation functions; for these, appropriate Modules of the "J" series were added.
- "Significant Variations" are those Modules added or rejected in significant proportions by officers surveyed.
- Many incumbents of Armor Air type positions rejected Modules of the "U" series; generally pertaining to employment of Infantry and Armor maneuver units and participation in ground combat. Existing Duty Modules are not sufficient to describe positions of officers in Armor tactical units with aviation roles. Further analysis of data will be made and one or more new Duty Modules to reflect tasks involved in air to ground combat will be drafted and verified, should additional Duty Module research be supported by the Army.

Notes: (contd)

- e. Executive Officers of most regiments and smaller size units perform many of the tasks inherent in supervising an office or staff section. Accordingly Module 0-A-5 is among the Modules assigned this position. However, some commanders prefer to utilize the capabilities of their Executive Officers either as individual's instead of supervisors, or as their "alter egos" in providing direction or supervision to parts or all of their units; in these circumstances, Module 0-A-5 would have to be rejected.
- f. Most of the incumbents of S2 positions rejected Duty Module 0-X-3, "Performs specialized nuclear effects analysis." Although no clear reason was given for this almost unanimous action, it is probable that the function for these units is performed by positions in headquarters of higher echelon, with very limited input required from the battalion/squadron level.
- g. More than half of the S3 position incumbents surveyed rejected Module 0-E-3, which concerns force development, although the interview phase of the project established that the Module was appropriate to the position. It appears that some commanders of battalion and lower echelon units require their S3 incumbents to perform the function, while others do not. The function is of great significance at higher headquarters, but loses importance as the echelon of the unit becomes lower. The function is practically non-existent below battalion level.
- h. A few of the incumbents of the position of Support Platoon Leader requested the addition of Modules concerning food, ammunition, and POL supply functions. Conversely, some of the Service Platoon Leaders rejected Modules concerning supply activities. The probable explanation is that supply during peacetime is performed by troop units in some areas, and by post or installation personnel and agencies in others.

AIR Duty Module Survey Form (Rev 1974)

Scale for
Importance
of task to
duty module

A - Major importance
B - Moderate importance
C - Minor importance

Date:

DUTY MODULE O-F-6 Performs staff functions pertaining to motor vehicle maintenance and operations		Importance of task (See scale above)	(6) Direct	(4) Supervise	(3) Do and supervise	(2) Do	(1) Assist	(0) Not applicable
0370	Advise superior and staff and subordinate unit commanders on motor vehicle maintenance and operations.							
0371	Exercise operational control over organization's motor vehicle maintenance element.							
0372	Monitor requisition, receipt, storage, safety and issue of automotive parts and POL.							
0373	Establish motor pool facility and coordinate its use.							
0374	Plan and coordinate motor maintenance programs and schedules.							
0375	Receive, prepare and revise records and reports pertaining to motor vehicle maintenance and operations.							
0376	Coordinate motor maintenance training.							
0377	Coordinate driver training, testing and licensing.							
0378	Conduct inspections pertaining to motor vehicle maintenance and readiness.							
0379	Determine vehicle requirements for motor movements and prepare movement portions of operations plan and orders.							

1. DO MODULE AND TASKS APPLY TO YOUR POSITION	(0) Not applicable	(1) Little applicability	(2) Several of tasks	(3) Majority of tasks	(4) All of tasks		
2. PERCENT OF TOTAL TIME SPENT ON THIS DUTY MODULE	(0) Not applicable	(1) 1-9%	(2) 10-29%	(3) 30-49%	(4) 50-69%	(5) 70-89%	(6) 90-100%
3. RELATIVE CRITICALITY OF THIS PART (MODULE) TO ENTIRE JOB	(0) Not applicable	(1) Least critical	(2) Average	(3) Critical	(4) The most critical		

APPENDIX D

KNOWLEDGE CHECKLIST
TANK BATTALION MOTOR OFFICER

DATE _____

Respondent's Position _____ / _____
Title Location

_____ / _____ / _____
MOS OPMS Specialty Grade

This form is being used to provide information about the level of knowledge required by certain officer positions in the Army.

We would like you to tell us the level of knowledge that is required in order for an incumbent to function in a capable manner, with no more than the usual level of supervision provided for the job. Use the same scale, described below, to rate the job requirements.

Expert: In-depth knowledge, including application of knowledge in unusual or complex situations.

High Degree: Highly knowledgeable. Can apply knowledge in some unusual or complex situations.

Moderate Degree: Level of knowledge needed to perform acceptably in typical or usual situations.

Slight Degree: Sufficient knowledge to function in simple or routine situations.

None: Not required by job or learned by incumbent.

Circle one letter on the Job Requirement scale that you think best describes the level of knowledge required for capable performance in the position you are rating.

POSITION TITLE: Tank Battalion Motor Officer

Level required
for capable
performance

Expert	High	Moderate	Slight	None
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Partial List of Required Knowledge:

1. Specific indicators for preventive or organizational track vehicle maintenance inspections	E	H	M	S	N
2. Army Maintenance System as applied to authorized equipment	E	H	M	S	N
3. Selection and training procedures for track vehicle operators and mechanics	E	H	M	S	N
4. Maintenance reports, orders, forms, records, logs and other publications for track equipment	E	H	M	S	N
5. Track and wheel vehicle recovery and evacuation techniques	E	H	M	S	N
6. PLL, repair parts supply and supply accounting	E	H	M	S	N
7. Fundamentals of establishing and maintaining a track vehicle maintenance program for using units	E	H	M	S	N
8. Procedures for maintenance trouble shooting and use of test equipment	E	H	M	S	N
9. Proper advice to give commander and staff on maintenance problems within battalion	E	H	M	S	N
10. Maintenance safety procedures	E	H	M	S	N
11. Techniques of command and technical supervision of motor pools and motor maintenance shops for a tank battalion	E	H	M	S	N
12. Expedient and emergency maintenance and recovery operations	E	H	M	S	N
13. Principles of tank and small arms repair and replacement	E	H	M	S	N

Level required
for capable
performance

	Expert	High	Moderate	Slight	None
14. Capabilities and limitations of Armored vehicles and equipment	E H	M S	N		
15. Personnel management at the unit level	E H	M S	N		
16. Regulations on disposition, salvage and cannibalization of equipment	E H	M S	N		
17. Techniques of individual combat	E H	M S	N		
18. Techniques of perimeter defense	E H	M S	N		
19. Techniques of motorized unit displacement, movement and relocation	E H	M S	N		
20. POL supply	E H	M S	N		
* * * * *					

(Partial List Only)

APPENDIX E

AIR Duty Module Survey Form (Rev 1974)

Date: October 1975

Code:

Identification No. _____

DUTY MODULE 0-A-2 Performs general administration	(5) Direct	(4) Supervise	(3) Do and supervise	(2) Do	(1) Assist	(0) Not applicable
0014 Prepare administrative SOPs and instruction.						
0015 Monitor security of classified documents.						
0003 Prepare and review administrative correspondence, memoranda, and reports.						
0016 Establish and operate a distribution system for messages, correspondence, and documents.						
0008 Screen incoming correspondence and distribute for action or information.						
0017 Establish and operate suspense system.						
0018 Authenticate orders and official correspondence.						
0019 Establish and post files of records and regulations.						
0012 Review, interpret and apply directives and information.						
0020 Schedule appointments, conferences, and other such activities.						
0021 Provide for reproduction and duplication services.						

1 DO MODULE AND TASKS APPLY TO YOUR POSITION	(0) Not applicable	(1) Little applicability	(2) Several of tasks	(3) Majority of tasks	(4) All of tasks		
a In actual or simulated combat operations and support?							
b In garrison and other than a?							
2 PERCENT OF TOTAL TIME SPENT ON THIS DUTY MODULE	(0) Not applicable	(1) 1-9%	(2) 10-29%	(3) 30-49%	(4) 50-69%	(5) 70-89%	(6) 90-100%
a In actual or simulated combat operations and support?							
b In garrison and other than a?							
3 RELATIVE CRITICALITY OF THIS PART (MODULE) TO ENTIRE JOB	(0) Not applicable	(1) Least critical	(2) Average	(3) Critical	(4) The most critical		
a In actual or simulated combat operations and support?							
b In garrison and other than a?							

AIR Duty Module Survey Form (Rev 1974)

 Date: **October 1975**

Code:

Identification No. _____

DUTY MODULE 0-F-6 Performs staff functions pertaining to motor vehicle maintenance and operations		(5) Direct	(4) Supervise	(3) Do and supervise	(2) Do	(1) Assist	(0) Not applicable
0370	Advise superior and staff and subordinate unit commanders on motor vehicle maintenance and operations.						
0371	Exercise operational control over organization's motor vehicle maintenance element.						
0372	Monitor requisition, receipt, storage, safety and issue of automotive parts and POL.						
0373	Establish motor pool facility and coordinate its use.						
0374	Plan and coordinate motor maintenance programs and schedules.						
0375	Receive, prepare and revise records and reports pertaining to motor vehicle maintenance and operations.						
0376	Coordinate motor maintenance training.						
0377	Coordinate driver training, testing and licensing.						
0378	Conduct inspections pertaining to motor vehicle maintenance and readiness.						
0379	Determine vehicle requirements for motor movements and prepare movement portions of operation plans and orders.						

1. DO MODULE AND TASKS APPLY TO YOUR POSITION:	(0) Not applicable	(1) Little applicability	(2) Several of tasks	(3) Majority of tasks	(4) All of tasks		
a. In actual or simulated combat operations and support?							
b. In garrison and other than a?							
2. PERCENT OF TOTAL TIME SPENT ON THIS DUTY MODULE	(0) Not applicable	(1) 1-9%	(2) 10-29%	(3) 30-49%	(4) 50-69%	(5) 70-89%	(6) 90-100%
a. In actual or simulated combat operations and support?							
b. In garrison and other than a?							
3. RELATIVE CRITICALITY OF THIS PART (MODULE) TO ENTIRE JOB	(0) Not applicable	(1) Least critical	(2) Average	(3) Critical	(4) The most critical		
a. In actual or simulated combat operations and support?							
b. In garrison and other than a?							

AIR Duty Module Survey Form (Rev 1974)

Identification No. _____

 Date: **October 1975**

Code: _____

DUTY MODULE 0-HH-8 Directs and controls repair of non-missile equipment		(5) Direct	(4) Supervise	(3) Do and supervise	(2) Do	(1) Assist	(0) Not applicable
1487	Inspect unserviceable equipment.						
1488	Classify equipment and designate repair.						
1489	Inspect items received to verify using units have performed their maintenance function.						
1490	Make repairs designated.						
1491	Store equipment temporarily.						
1492	Issue serviceable equipment to user or to storage facility.						
1493	Dispose of non-repairable equipment.						
1494	Prepare records of equipment processed.						
1495	Post records of equipment repaired and supplies used.						
1496	Requisition, receive, and store supplies used to repair equipment.						
1497	Perform in-storage-maintenance of items stored.						
0799	Assign personnel to duty, inspect work, train in proper procedures, and provide leadership.						

1	DO MODULE AND TASKS APPLY TO YOUR POSITION	(0) Not applicable	(1) Little applicability	(2) Several of tasks	(3) Majority of tasks	(4) All of tasks		
a	In actual or simulated combat operations and support?							
b	In garrison and other than a?							
2	PERCENT OF TOTAL TIME SPENT ON THIS DUTY MODULE	(0) Not applicable	(1) 1-9%	(2) 10-29%	(3) 30-49%	(4) 50-69%	(5) 70-89%	(6) 90-100%
a	In actual or simulated combat operations and support?							
b	In garrison and other than a?							
3	RELATIVE CRITICALITY OF THIS PART (MODULE) TO ENTIRE JOB	(0) Not applicable	(1) Least critical	(2) Average	(3) Critical	(4) The most critical		
a	In actual or simulated combat operations and support?							
b	In garrison and other than a?							

AIR Duty Module Survey Form (Rev 1974)

Date: **October 1975**

Code:

Identification No. _____

DUTY MODULE 0-U-6 Participates individually and directly in ground combat		(6) Direct	(4) Supervise	(3) Do and supervise	(2) Do	(1) Assist	(0) Not applicable
0832	Fight enemy at close range with individual weapons or in hand-to-hand combat.						
0833	Employ night vision equipment in reconnaissance and target identification.						
0834	Sense effect of fire, and adjust fire accordingly.						
0835	Drive vehicle in combat when regular operator is incapacitated or unavailable.						
0836	Employ first aid.						
0837	Operate crew-served weapons when regular crew is depleted.						
0838	Operate field telephone and voice radio.						
0839	Serve in patrols as required by the tactical situation.						

1 DO MODULE AND TASKS APPLY TO YOUR POSITION		(0) Not applicable	(1) Little applicability	(2) Several of tasks	(3) Majority of tasks	(4) All of tasks		
a	In actual or simulated combat operations and support?							
b	In garrison and other than a?							
2 PERCENT OF TOTAL TIME SPENT ON THIS DUTY MODULE		(0) Not applicable	(1) 1-9%	(2) 10-29%	(3) 30-49%	(4) 50-69%	(5) 70-89%	(6) 90-100%
a	In actual or simulated combat operations and support?							
b	In garrison and other than a?							
3 RELATIVE CRITICALITY OF THIS PART (MODULE) TO ENTIRE JOB		(0) Not applicable	(1) Least critical	(2) Average	(3) Critical	(4) The most critical		
a	In actual or simulated combat operations and support?							
b	In garrison and other than a?							